

## **Digitalisation**

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Digitalization is one of the main driving forces of contemporary society and could be considered one of the key elements of society's sustainable development (Jovanović, Dlačić, 2018.).

Before we explain what is meant by the term digitalization, it is important to distinguish between another term and its meaning in order to understand and discuss the importance and steps of digitalization, and to properly observe these phenomena. This is the concept of digitization, which carries the following meaning: a process by which existing analog records are converted into the digital documents. The data is not changed by this process but is only encoded in digital format. Digitization would be the first step in the digitization process.

Today's world has made a big step into the fourth industrial revolution, in conjunction with the process of digitalization, which is pervading all aspects of our life. Different definitions of the digitalization process can be summarized as follows: Digitalization is defined as a process by which various contents, texts, photography, sounds, films, and videos are changing from analog to digital; transformed to a binary code. In this way all data could be processed, saved, and communicated. Most definitions would agree that digitalization has helped create inclusive environments in which everybody could be involved, enabled more open communication, and has accelerated the process of creating and exchanging knowledge (Martinoli, 2019).

For generations that are educated today, from pre-school to university education, digitalization is not a new technology but rather a natural environment and a part of everyday life. For these generations, the analog world and the offline life is unthinkable. At the same time, today's world is partly digitalized because there are still parts of the population who are excluded from the digital world (see Digital Divide) as well as those resisting the process of digitalization. Thus, it would be more appropriate to say that we are living in a hybrid digital time.

In 2018 the European Commission published a Digital Education Plan (like most member states or even local authorities did) reflecting the challenges of digitalization in education. In this document education is considered as the basis of growth, development, and inclusion in all member states and it has become the task for all participants to adhere to the Plan's suggestions

as much as possible, while also considering all the challenges that digitalization brings along (e.g., Digital Divide, Digital Gender Gap). To ensure successful implementation, the suggested document highlights three priority measures: 1) Improvement in using digital technology in learning and teaching, 2) Development of digital competences and skills, 3) Education improvement by better data analyses and better predictions.

In education, digitalization contributes to a more inclusive environment with fair accessibility to learning materials, especially for students with special needs. By developing digital technology that is available to a larger number of users (for example laptops became more affordable because of the price reduction) and with the improvement of teachers' skills, better conditions are established for a growing number of users. At the same time, educational content and teacher-student connections through digital applications, could increase the inequality among students and teachers (Tonković, Pogrančić, Vrsalović, 2020). On the other hand, the use of technology in teaching creates additional interest, fun, and dynamics for students. During the use of digital technology, it is observed that students are more motivated and research for content more independently (Gjud, Popčević, 2020). As we progress, new types of digital divide are appearing and becoming a big challenge (Kim, Yi, Hong, 2021).

During the time of the Covid-19 Pandemic, the intense development of digitalization in teaching was clearly shown, however we still do not have a sufficient explanation of how the acceleration of the digitalization process potentially contributes to the reduction of inequality, or how it enables more participants to become involved in and make use of digital resources. Although digital technology is quite helpful in teaching, it should be used in order to facilitate learning and accessing certain materials, but not to replace the onsite interaction between students and teachers. In the context of the pandemic, learning materials were prepared in a digital mode. By now it is increasingly evident that this way of transmitting learning materials enables more creative, more innovative, and more flexible mode in the teaching process. Digital materials enable the implementation of new teaching methods and learning and also enable flexibility for teachers during the process of preparation and structuring of the classes. The Pandemic accelerated digitalization, and hybrid teaching showed that it is necessary to have a ready-made system that could respond to new challenges of the digital era.

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